

S/803/62/000/003/010/012
D201/D308

The charge storing operation ...

3) The comparatively small brightness of the signal seems to be due to the small value of the effective secondary emission coefficient. This means that the -0,0 mode of operation is not optimal and should not be recommended for storage of transients of short duration. There are 24 figures.

Card 2/2

S/803/62/000/003/011/012
D201/D308

AUTHORS: Arkhipov, V.K. and Stepanov, B.M.

TITLE: Charge-storing operation of an oscillograph tube
with forced removal of secondary emission electrons
during recording

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Avtomatika
i telemekhanika, no. 3, 1962. Sistemy upravleniya
yadernymi energeticheskimi ustanovkami, 86-102

TEXT: The authors give the results of an experimental investigation into the 0,-,0 mode of operation of a CRT. The experiments have shown the following advantages of the 0,+0 mode over the -0,0 mode: 1) The absolute values of collector voltages and input signal amplitudes being equal, the speed of writing and its brightness is several times greater. 2) The output signal (other conditions being the same) of the 0,+0 mode increases very nearly linearly with the collector voltage and at 2-3 kV the recording current reaches several micro-ampere, with the recording speed increased

Card 1/2

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D201/D308

Charge-storing operation ...

by more than one order of magnitude as compared with that of the - ,0,0 mode. The secondary emission properties of the potential carrier are at the same time fully used, the secondary emission coefficient reaching the value of 3 to 4, owing to the suppression of small energy secondary electrons. 3) In the 0, + 0 mode the basic distortion of the signal shape occurs during recording, which makes it easier to design circuits for storage of fast transients. There are 25 figures.

Card 2/2

S/803/62/000/003/012/012
D201/D308

AUTHORS: Arkhipov, V.K. and Stepanov, B.M.

TITLE: Operating conditions of a charge storing cathode ray tube securing maximum writing speed in registering single fast transient processes

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Avtomatika i telemekhanika, no. 3, 1962. Sistemy upravleniya yadernymi energeticheskimi ustankami, 103-106

TEXT: From the most general concepts of potential relief recording and reading processes, the authors determine the conditions for maximum recording speed for a given S/N ratio during the read-out process. Since the recording speed is assumed to be high the secondary emission coefficient is taken as constant and the charge is proportional to the time during which the beam is directed at the screen surface element. The expressions derived for the signal and noise voltage amplitudes show that for a given set of conditions the signal voltage amplitude depends on the mode of recording and on

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D201/D308

Operating conditions of a charge ...

stray capacitances only. For increasing the signal amplitude - the recording beam current has to be increased and strays decreased; the operating conditions should be such as to result in a maximum effective suppression of secondary emission electrons during recording in order to obtain the maximum possible charge of the spot.

Card 2/2

41440
S/120/62/000/005/021/036
E192/E382

9,4150

AUTHOR: Akimov, Yu.A.. and Stepanov, B.M.
TITLE: A wideband oscillographic cathode-ray tube
PERIODICAL: Pribory i tekhnika eksperimenta, no. 5, 1962,
128 - 130

TEXT: The tube employs a deflection system based on a line with distributed parameters. The deflection plates are in the form of a section of a strip line having a wave impedance of 75Ω ; these are gradually tapered and matched with coaxial lines which are led out through the glass envelope by means of coaxial outlets (Fig. 1). The investigations showed that provided this deflection system was properly constructed it did not show any resonance effects or produce reflections of the signal from the tapered sections of the line. The actual tube has two electron guns with two identical deflection systems. The guns operate at accelerating voltages of 20 kV and produce a trace 0.2 - 0.5 mm thick at the screen; the writing speed can be as high as 50 000 km/sec. The diameter of the screen is 170 mm. The system does not use a post-deflection acceleration

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S/120/62/000/005/021/036
E192/E382

A wideband oscillographic

stage in order to reduce the distortion of the signal image at the screen. The transit time of the electrons through the deflection system is 3×10^{-10} sec. The upper frequency limit for the signals displayed by the tube is therefore approximately equal to 1 500 Mc/s. The sensitivity with respect to the signal plates is 0.045 mm/V, so that signals having an amplitude of 1 000 V can be observed. The tube is provided with an additional pair of deflection plates which are used for calibration by shifting the level of the investigated signal or by using a sinusoidal waveform for producing time-markers. There are 4 figures.

SUBMITTED: November 5, 1961

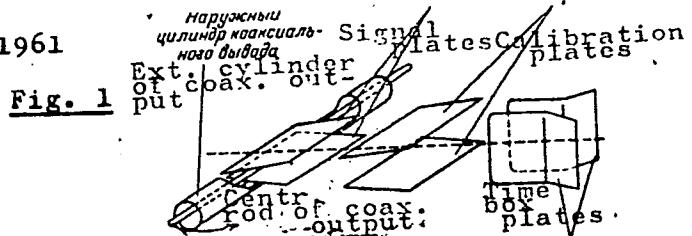


Fig. 1

Card 2/2

ARKHIPOV, V.K.; STEPANOV, B.M.

Telemetering of high-speed processes. Izv. vys. ucheb. zav.;
radiotekh. 6 no.5:554-561 S-0 '63. (MIRA 17:1)

1. Rekomendovana kafedroy avtomatiki i telemekhaniki Moskovskogo
inzhenerno-fizicheskogo instituta.

39165
7.4/3.0

S/120/62/000/003/033/048
E032/E114

AUTHORS: Andreyeva, L.I., and Stepanov, B.M.

TITLE: A two-channel electron multiplier

PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 158-141

TEXT: A description is given of the 3Jly-09 (ELU-09) multiplier which is designed for the recording of pulsed X-ray radiation in the range 0.1 to 3 MeV. The time resolution is 1.5×10^{-9} , the output current amplitude in the linear region is up to 15 A , and the amplification is $10^8 - 10^9$. The maximum output current is 50 A . Fig.2 shows the electron-optical system. The metal cathode has a yield of 0.0015 electron/photon. The working area of the cathode is 30 cm^2 . The multiplier incorporates the anti-noise screen β and is maintained at a positive potential relative to the cathode, thereby reducing the noise to less than $10^{-7} - 10^{-8} \text{ A}$. The sensitivity is $10 \times 10^{-14} - 100 \times 10^{-14} \text{ A}/\text{photon/sec.cm}^2$.

There are 6 figures.

SUBMITTED: November 5, 1961

Card 1/2

STEPANOV, B.M.

Abract theory of the R-operation. Izv. AN SSSR. Ser. mat. 27
no.4:819-830 J1-Ag '63. (MIRA 16:8)

(Quantum field theory)

L 13081-63

EWT(d)/EWT(l)/FCC(w)/BDS AFFTC/ASD IJP(C)

ACCESSION NR: AP3003508

S/0020/63/151/001/0084/0086

56
55AUTHOR: Stepanov, B. M.TITLE: The construction of an S-matrix

SOURCE: ANSSSR. Doklady, v. 151, no. 1, 1963, 84-86

TOPIC TAGS: S-matrix, mathematical induction, ultraviolet divergency, perturbation theory, quantum mechanics

ABSTRACT: A mathematical induction method is suggested for the construction of an S-matrix which avoids the appearance of the ultraviolet divergencies in the momentum space without the necessity of introducing normalization. From the physical conditions usually imposed on an S-matrix, such as causality, unitarity, Lorentz-invariances, etc., only the former is considered and is given a rigorous mathematical formulation. "The author expresses his gratitude to Academician N. N. Bogolyubov and V. S. Vladimirov for valuable discussions". This report was presented by Academician N. N. Bogolyubov 8 Feb 1963. Orig. art. has: 6 formulas.

Association: Inst. of Mathematics, Academy of Sciences, SSSR

Card 1/21

L 4406-66

ACCESSION NR: AP5024170

UR/0115/65/000/008/0038/0043
621.383(047.1) :535.35.087

AUTHOR: Andreyeva, L. I.; Stepanov, B. M.

TITLE: Photocells for measuring powerful light pulses *9M*

SOURCE: Izmeritel'naya tekhnika, no. 8, 1965, 38-43

*34
B*

TOPIC TAGS: photocathode, photoelectric cell, light pulse, photodiode, nanosecond pulse

ABSTRACT: The study and development of devices generating single light pulses of nanosecond duration necessitate a visual analysis of the shape and structure of these pulses and of the effect of various parameters on them. Devices used for recording such pulses must have wide-band characteristics and be very sensitive. The present article reviews the existing photocells which meet these requirements and are capable of linear conversion of the powerful light pulses into electric pulses; namely, vacuum photocells with an extrinsic photoeffect having antimony-cesium, silver-oxygen-cesium, or multialkali photocathodes deposited on highly conductive metal substrates for producing high photocurrent densities. The sensitivity and time resolution of the photocells are discussed,

Card 1/2

L 4406-66

ACCESSION NR: AP5024170

and a description of the coaxial photocell and photocells with an end-type photocathode and a wide-band coaxial output is given. Orig. art. has: 6 figures, 2 tables, and 22 formulas.

[08]

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 017

ENCL: 00

OTHER: 012

SUB CODE: EC, OP

ATD PRESS: 44125

STEPANOV, B.M.

Derivation of an S-matrix in accordance with the perturbation theory.
Izv. AN SSSR. Ser. mat. 29 no.5:1037-1054 '65. (MIRA 18:10)

L 44603-66 EWT(1)/EWT(m)/EEC(k)-2/T/EWP(t)/ETI/EWP(k) IJP(c) WG/JU/JU
ACC NR: AP6030983 SOURCE CODE: UR/0181/66/008/009/2816/2818

AUTHOR: Basov, N. G.; Drozhbin, Yu. A.; Zakharov, Yu. P.; Nikitin, V. V.;
Semenov, A. S.; Stepanov, B. M.; Tolmachev, A. M.; Yakovlev, V. A.

ORG: Physics Institute im. P. N. Lebedev, AN SSSR, Moscow (Fizicheskiy institut
AN SSSR)

TITLE: The effect of injection current on the temporal characteristics of a GaAs
laser

SOURCE: Fizika tverdogo tela, v. 8, no. 9, 1966, 2816-2818

TOPIC TAGS: solid state laser, semiconductor laser, gallium arsenide, laser, injection
laser, ELECTRIC CURRENT, INJECTION CURRENT

ABSTRACT: In an investigation of the temporal characteristics of a GaAs laser the
radiative delay time (τ_g) was determined as a function of the injection current.
Ordinary diodes, prepared by means of the diffusion process, were placed in a dewar
at the liquid N temperature. The laser was excited by a current oscillator with pulse
amplitudes from 4 to 40 amp and a duration of 40 nanosec. Several diodes were investi-
gated at threshold currents from 1.8 to 4 amp. The dependence of τ_g on injection
current indicates that the value of τ_g approaches 1.8×10^{-9} sec. This corresponds
approximately to the spontaneous radiative lifetimes for electrons and holes calculated
theoretically elsewhere (W. P. Dumke, Phys. Rev., 132, 1998, 1963). With a 16-fold

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L 44603-66
ACC NR: AP6030983

increase of I_{thr} , τ_g increases to 0.9 nanosec; this is explained by the time increase necessary to achieve population inversion. To eliminate delay due to spontaneous emission and to achieve stimulated emission, the diode was pulsed by currents from an auxilliary oscillator with amplitudes of 1.5 I_{thr} and durations of approximately 200 nanosec. Some 50 nanosec after the onset of the auxilliary pulse, the diode was pulsed by a positive current from the master oscillator. The delay time between the onset of the injection current from the master oscillator and the radiation induced by it was measured, and at 17 I_{thr} was reduced to 6×10^{-11} sec. A further decrease in τ_g calls for considerably increased injection currents. The experimental data indicate that GaAs lasers can be used as radiation modulators in the centimeter band and as high-speed (10^{-10} — 10^{11} sec) optical switches. Orig. art. has: 1 figure. [YK]

SUB CODE: 20/ SUBM DATE: 13Apr66/ ORIG REF: 001/ OTH REF: 002/ ATD PRESS:
5078

Card 2/2 *LJM*

ACC NR: AP7000135

SOURCE CODE: UR/0115/66/000/011/0092/0093

AUTHOR: Drozhbin, Yu. A.; Nikitin, V. V.; Semenov, A. S.; Stepanov, B. M.; Tolmachev, A. M.; Yakovlev, V. A.

ORG: none

TITLE: A method of measuring the inertia of semiconductor lasers,

SOURCE: Izmeritel'naya tekhnika, no. 11, 1966, 92-93

TOPIC TAGS: laser emission, semiconductor laser, minority carrier

ABSTRACT: A new method is proposed for measuring the delay time (inertia) between the laser diode emission and the injection current, which makes it possible to determine the upper frequency limit of the laser and the lifetime of the minority carriers. The time delay is determined by fixing the time of the leading edge of the injection pulse and the instant of appearance of laser emission. These times are displayed on a cathode ray screen as marks on a time base. The equipment consists of two current pulse oscillators, trigger generator, a blocking pulse circuit, a sweep generator, an optical system, a calibrated cable, and an electron optical transducer. The injection pulse signal is carried by the calibrated cable to a pair of deflection plates in the transducer. The laser emission is focussed on the photostage of the transducer, producing a beam of electrons, which are accelerated through the transducer tube. This beam is de-

Card 1/2

UDC: 621.375.4

ACC NR: AP7000135

selected by the sweep generator so as to form the timed base line. The distance from the beginning of this line and the injection pulse is the delay time or inertia. The error of measurement is calculated to be $5 \cdot 10^{-11}$ sec. This error can be decreased to 10^{-11} sec by taking better account of the travel time of the electrons in the beam and improving the resolution time of the transducer. A delay time of $6 \cdot 10^{-11}$ sec was measured for a GaAs laser. Orig. art. has: 2 figures.

SUB CODE: 20/

SUBM DATE: 07May66/

ORIG REF: 003/

OTH REF: 003

Card 2/2

STEPANOV, B.N.

Chronic fistule of the intestinal lymphatic duct in a cat. [with
summary in English]. Biul.eksp.bio. i med. 46 no.7:110-113 Je '58
(MIRA 11:7)

1. Iz kafedry normal'noy anatomii (zav. - prof. K.V. Romodanovskiy)
Novosibirskogo meditsinskogo instituta (dir. - prof. G.D. Zalesskiy),
Predstavlena akademikom L.A. Orbeli.

(LYMPHATIC SYSTEM, physiology
exam. through fistula of intestinal lymphatic duct in
cat (Rus))

STEPANOV, B N.

USSR/Cultivated Plants. Grains.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20227.

Author : B. Stepanov

Inst : Not given.

Title : The Pressing Problem of Improving the Grain Economy in
Kedabekskiy Rayon.
(Nasushchyy vopros pod"ema zernovogo khozyaystva
v Kedabekskom Rayone).

Orig Pub: Sots.s. kh. Azerbaydzhana, 1956, No 5, 28-30.

Abstract: Information is given on the yielding capacity of several varieties of summer wheat and summer barley sorted out from the local population. The local varieties with the greatest potential are mentioned: the Kyrmyzy-bugda winter wheat, Badakendskiy winter barley, Kyrmyzy-bugda Summer

Card : 1/2

STEPANOV, B. N.

"Grain Crops in Kedabekskiy Rayon of Azerbaydzhan SSR and Their Economic and Biological Characteristics." Cand Agr Sci, Azerbaydzhan Agricultural Inst, Min Higher Education USSR, Kirovabad, 1954.
(KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions
(14)

STEPANOV, B. N.

USSR/Physical Chemistry - Molecule. Chemical Bond, B-4

Abst Journal: Referat Zhur ~ Khimiya, No 19, 1956, 60738

Author: Stepanov, B. N.

Institution: None

Title: On the Theory of Coloration of Organic Compounds. I, II

Original
Periodical: Zh. fiz. khimii, 1955, 29, No 12, 2173-2184; 1956, 30, No 1, 34-49

Abstract: I. Three fundamental propositions of the theory of coloration of organic compounds are advanced: (1) light absorption by organic molecules in visible region of the spectrum takes place only in the presence of open or closed systems of conjugated double bonds and lengthening of conjugated system results in shift of absorption band toward longer wave lengths; (2) addition to conjugated system of electron-donor and electron-acceptor substituents causing constant displacement of electrons in the system results in a shift of the absorption band toward longer wave lengths and an increase of its intensity; (3) ionization of organic molecules enhancing electron-

Card 1/2

USOV, S.V., prof. (Leningrad); PAVLOV, G.M., kand. tekhn. nauk
(Leningrad); KANTAN, V.V., inzh. (Leningrad); PETROVA, S.S.,
inzh. (Leningrad); STEPANOV, B.N., inzh. (Leningrad)

Solution of a problem on optimum load distribution using the
ANRAN-1V computer. Elektrichestvo no.2:24-27 F '64.
(MIRA 17:3)

KANTAN, V.V., kand. tekhn. nauk; STEPANOV, B.N., inzh.

Simplification of calculational formulas for determining fractional unit power losses. Elektrichestvo no.8:38-39 Ag '64.
(MIRA 17:11)

1. Leningradskiy politekhnicheskiy institut imeni Kalinina.

L 42933-66

EWT(m)/EWP(t)/ETI

JD/WW/JG

ACC NR: AP6013309

SOURCE CODE: UR/0413/66/000/008/0102/0102

44
B
15

INVENTOR: Stepanov, B. N.; Maslan, L. B.; Mentsov, B. A.

ORG: none

TITLE: Waveguide system for working melts. Class 42, No. 180871

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 102

TOPIC TAGS: waveguide, converter, laboratory instrument, ~~and other~~

ABSTRACT: An Author Certificate has been issued describing a waveguide system for treating melts. It contains an ultrasonic converter, an adaptor, and a tool. To make use of the entire tool, extension waveguides of different lengths are installed between the adaptor and tool to compensate for the wear of the titanium tool (see Fig. 1). Orig. art. has: 1 figure. [Translation] [NT]

Card 1/2

UDC: 621.9.048.6.004.6

L 42933-66

ACC NR: AP6013309

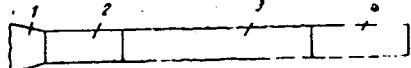


Fig. 1. Waveguide system for working
melts.
1—converter; 2—adaptor;
3—extension waveguide;
4—tool.

SUB CODE: 11, *OG/* SUBM DATE: 06Jun64/

Card 2/2 MLP

STEPANOV, Boris Pavlovich

Circulation, mailing, and delivery of newspapers and magazines in the USSR
Moskva 1955. 49 p. (55-38871)

1. Newspaper circulation.
2. Periodicals.. Circulation.

GALAKTIONOV, A.T.; DENISOV, Yu.A.; KOPYTOV, G.T.; MASLOV, Yu.A.; NIKONOV, I.P.; PETUNIN, I.V.; KOCHEGA , G.N.; KUZNETSOV, A.P.; LELEKO, N.M.; RAZIKOV, M.I.; SPESHKOV, V.V.; STEPANOV, B.V., STEPANOV, V.V.; kand. tekhn. nauk; SHELOMOV, B.Ye.; YUNYSHEV, G.P.; YES'KOV, K.A., dots., retsenzent; BAKSHI, O.A., dots., retsenzent; BEREZKIN, P.N., dots., retsenzent; PATSKEVICH, I.R.,dots., retsenzent; RUDAKOV, A.S., dots., retsenzent; FIZHBEYN, N.B., inzh., retsenzent; KHRUSTALEV, L.Ya., inzh., retsenzent; KRUTIKHOVSKIY, V.G., inzh., red. BOBROV, Ye.I., kand. tekhn. nauk, red. DUGINA, N.A., tekhn. red.

[Welding handbook] Spravochnik rabochego-svarshchika. Pod red. V.V.Stepanova. Moskva, gos. nauchno-tehnizd-vo mashinostroit. lit-ry, 1960. 640 p. (MIRA 14:6) (Welding)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

GODEMENT, Roger; VENKOV, B.B [translator]; RUKOLAYNE, A.V.[translator];
STEPANOV, B.V.[translator]; IVANOV, A.A., red.

[Algebraic topology and the theory of pencils] Algebraiche-
skaia topologija i teoriia puchkov. Pod red. A.A.Ivanova.
Moskva, Izd-vo inostr.lit-ry, 1961. 319 p. (MIRA 15:10)
(Groups, Theory of) (Algebraic topology)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

16(1)

AUTHOR:

Stepanov, B.V.

SOV/20-124-5-6/62

TITLE:

On the Mean Value of the k-th Power of the Class Number for
an Imaginary Quadratic Field (O sredнем znachenii k-oy stepeni
chisla klassov dlya mnimogo kvadratichnogo polya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1959, Vol 124, Nr 5, pp 984-986 (USSR)

ABSTRACT: The following asymptotic relation is proved :

$$\sum_{m=1}^N h^k(-m) = \frac{2^{k+1}}{\pi^k (k+2)} N^{\frac{k+2}{2}} \sum_{n=1}^{\infty} (-1)^{\frac{n-1}{2}} \frac{\varphi(n) \tau_k(n^2)}{n^{\frac{3}{2}}} + \\ + O\left(N \exp\left[-C(\ln N)^{1/2 - \varepsilon}\right]\right)$$

Here it is, $h(-m) = \prod_{p|m} p^{\frac{1}{2}} \sqrt{m} L(1, \chi_m)$ the number of the pure forms of roots of Gauss determinant $-m$ ($m > 0$) ; $\varepsilon > 0$ arbitrarily small ; $C > 0$ constant ; $\tau_k(n)$ the number of all representations of the number n as product of k factors.

Card 1/2

On the Mean Value of the k -th Power of the Class SOV/20-124-5-6/62
Number for an Imaginary Quadratic Field

The proof is based on an estimation of $\sum_{m=1}^N L^k(1, \chi_m)$ carried

out by means of the results of I.M. Vinogradov, Yu.V. Linnik
and A. Ren'yi, where it is

$$L^k(1, \chi_m) = \sum_{n=1}^{\infty} \left(\frac{-m}{n} \right) \frac{c_k(n)}{n}.$$

It is mentioned that the asymptotic expansion of Dimmann
(Ref 5) was wrong.

There are 5 Soviet references.

PRESENTED: October 31, 1958, by I.M. Vinogradov, Academician

SUBMITTED: October 30, 1958

Card 2/2

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, B.V.

Device for making 8-void reinforced concrete floor panels.
Nov.tekh.i pered. op. v stroi. 18 no.2:22-25 F '56.
(Floors, Concrete) (MILRA 9:6)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

STEPANOV, B.V., inzh.

Experience in manufacturing and erecting precast reinforced
concrete bridge spans. Avt.dor. 22 no.4:15-16 Ap '59.
(MIRA 12:6)

(Bridges, Concrete)

GRIGOROVICH, I.I., inzh.; STEPANOV, B.V., inzh.; ROZENBLYUM, A.P., inzh.

Half kilometer viaduct was built in six months. Avt.dor. 23
no.3:10-11 Mr '60. (MIRA '3:6)
(Minsk--Viaducts)

S/135/63/000/003/008/011
A006/A101

AUTHOR: Stepanov, B. V., Engineer

TITLE: Carbide hardfacing with the admixture of tungsten carbides of parts and tools subjected to high-speed wear

PERIODICAL: Svarochnoye proizvodstvo, no. 3, 1963, 30 - 32

TEXT: A new hardfacing method was developed yielding dense built-up metal without cracks, having high hardness. In this process hardfacing with an alloyed wire is combined with additional alloying of the built-up metal with cast tungsten carbide grit. Uniform and complete saturation of the built-up metal with tungsten carbide grains is assured in automatic hardfacing (Figure 4). Direct current is supplied to the electrode wire. The filler wire is supplied to the arc zone through an insulated nozzle. The filler wire coating is molten due to the heat of the arc which is burning between the electrode wire and the hard-faced part. The optimum hardfacing conditions are: current intensity 450 - 500 amps; voltage 38 - 40 v; second electrode feed rate: 88.7 - 101.7 m/h; feed rate of first wire 67.5 - 77.4 m/h; hardfacing speed 15 - 18 m/h. Hard-

Card 1/3

8/135/63/000/003/008/011
A006/A101

Carbide hardfacing with the...

facing is conducted under AH-20 (AN-20) or AH -30 (AN-30) flux. The diameter of the electrode wire for hardfacing the metal is 3.5 - 3.6 mm; the diameter of the filler wire containing tungsten or other carbide grit is 6 - 6.5 mm. Parts requiring fuller saturation are hardfaced with grit of 0.45 - 0.65 mm granulation; otherwise 0.75 - 1.25 mm granulation grit is used. The information includes recommendations as to the hardfacing process. It was found that the proposed method increased considerably the wear-resistance and service life of parts and tools operating under heavy abrasive wear conditions. There are 5 figures.

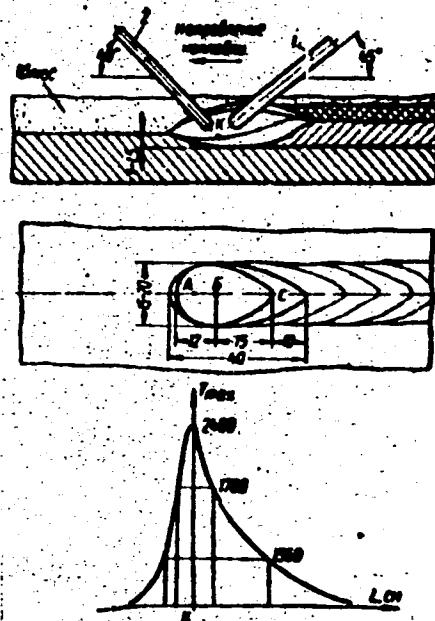
ASSOCIATION: URALMASHZAVOD

Card 2/3

Carbide hardfacing with the...

Figure 4. Technological schematic diagram of automatic hardfacing
Legend: 1 - filler wire,
2 - electrode wire.

S/135/63/000/003/008/011
A006/A101



Card 3/3

KAMENTSEV, V.P.; MOYZHES, L.B., starshiy nauchnyy sotrudnik; STEPANOV, B.V.

Effectiveness of using full-span and built-up beams in bridges.
Transp. stroi. 13 no.6:59-61 Je '63. (MIRA 16:9)

1. Rukovoditel' laboratorii postroyki mostov Vsesoyuznogo nauchno-
issledovatel'skogo instituta transportnogo stroitel'stva (for
Kamentsev). 2. Glavnnyy inzh. mostostroitel'nogo rayona No.2
Glavnogo upravleniya shosseynykh dorog pri Sovete Ministrov Belorusskoy
SSR (for Stepanov).

(Bridges)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEYANOV, B.V., inzh.

New brands of powder wire for wear-resistant hard facing.
Stor. st. NIITIAZHMASHA Uralmashzavoda no. 3:80-91 '64.
(MIRA 17:7)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

I 53877-65 EWT(m)/EWP(w)/EPF(n)-2/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) Pu-4 IJP(c)

MJW/JD/JG
ACCESSION NR: AP5014896

UR/0135/65/000/006/0017/0019
621.791.92.045

34
27
B

AUTHOR: Stepanov, B. V. (Engineer)

TITLE: Powdered-metal welding wires for wear-resistant build-up

SOURCE: Svarochnoye proizvodstvo, no. 6, 1965, 17-19

TOPIC TAGS: welding wire, wear resistance, scaling resistance, build up sequence, flux welding, carbon dioxide shielded welding, heat treatment, wear resistant alloy, hardening temperature, red hardness

ABSTRACT: The author examines a series of wear-resistant alloys based on U12Kh6 steel and additionally alloyed with Si, Mn, Ni, Mo, V, Nb, W, and Ti. These alloys were prepared in the form of powdered-metal wires of 3.6 mm diameter and used to build up (in a five-layer sequence) bars of two types of steel.

L 53877-65
ACCESSION NR: AP5014896

in a maximal hardness, HRC₁₅₀ 65-67 (HRA₆₀ 84-85). In the case of PP-G tempering at 550°C increases the hardness to HRA 81; this is apparently attributable to the decomposition of residual austenite in this alloy during tempering. An additional series of tests to determine the optimal regime of heat treatment and red hardness established that these alloys also display a high resistance to scaling. A table of the percentile content of different elements in these alloys is presented, and so is a table of the wear coefficients (in g/cm² -min) of 15 selected build-up alloys. Since the findings were sufficiently satisfactory, in addition to flux welding, the alloys also were deposited by the carbon dioxide-shielded arc welding method on adding either ferrotitanium or ferromanganese and TiC carbide to their composition. These alloys display a high wear resistance and hardness. Their use for the build-up of bulky machine parts by means of flux welding and welding in CO₂ atmosphere requires prior or attendant heating of the parts to 200-250°C.

ASSOCIATION: Uralmashzavod

SUBMITTED: 000

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 001

Card # 2/2

STEPANOV, B.V., inzh.

Universal equipment for mounting beams. Avt. dor. 28 no. 9; 16
S '65. (MIRA 18;10)

S/712/62/028/000/007/020
EO32/E314

AUTHORS: Stepanov, B.Ye. and Severnyy, A.B.

TITLE: Photoelectric method for measuring the magnitude and direction of the magnetic field on the solar surface

SOURCE: Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya. v. 28. 1962. 166-193

TEXT: The aim of this work was to develop a photoelectric method of measuring the magnitude and direction of the magnetic field, the direction being characterized by the angle between the field vector and the line of sight γ and the azimuth of the transverse component of the field χ . A search for this method was begun in 1958 and the development was completed in 1959. Since then, the method has been used to record the fields in active regions and a preliminary description of it was given in a previous paper (A.B. Severnyy - Trans. IAU, 11-13, 1961 (in press)). The method is being used with the magnetograph of the Krymskaya astrofizicheskaya observatoriya (Crimean Astrophysical Observatory). $\pm \lambda/4$ modulation is employed in measurements of the longitudinal field and the photocurrents due to oscillations in the intensity

Card 1/3

S/712/62/028/000/007/020
E032/E514

Photoelectric method

of σ_1 and σ_2 components at the two slits of the photometer are subtracted. In measuring the transverse magnetic field a 0, $\lambda/2$ modulation is used (ADP crystal plus quartz $\lambda/4$ plate) and the two photocurrents are added. The azimuth of the transverse field is determined by recording the signals with the quartz $\lambda/4$ plate in two positions separated by an angular distance of 45° . In order to determine the relation between the signals and γ , χ the electrical oscillations for a magnetically split line are resolved into two mutually perpendicular oscillations so that their intensities can be added within the limits of an optically thick absorption line, and the blending and interaction between differently polarized σ and γ components can be taken into account. Calculations used in the interpretation of the data were reported in earlier papers (V.Ye. Stepanov - Izv.Krymskoy astrofiz. obs., 19, 20, 1958; 18, 136, 1958). A method is described for the calibration of the apparatus with the aid of a special magnet. The noise level corresponds to about 100 Oe in measurements of transverse fields, so that the method cannot be used for regions with very low fields ($H < 100$ Oe). The noise level for the Card 2/3

S/712/62/028/000/007/020
E032/E314

Photoelectric method

longitudinal component is about 1 Oe. Charts showing magnetic-field distributions in active regions are reproduced. The magnetic-field charts reveal an eddy structure in some cases. The spiral structure of H_1 shows that apart from the azimuthal component H_ϕ , there is also a radial component H_r . This indicates that the sunspot field differs from a force-free field with cylindrical symmetry. Further studies designed to obtain more detailed information will be concerned with the variation in the field with height. There are 14 figures and 1 table.

SUBMITTED: December 20, 1961

Card 3/3

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, D.

Determining amortization deduction norms under socialism.
Vop. ekon. no.3:129-135 Mr '61. (MIRA 14:3)
(Amortization)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

STEPANOV, D.; RODINOV, Ya. A.; KUVALDIN, B. I., inzh. (Moskva);
VAL'KOV, A. S., inzh. (Moskva); LAGOCYSKIY, A. I., inzh. (Vil'nyus);
LUZHENOVSKIY, A. G., inzh. (Moskva)

"Arrangement and maintenance of narrow-gauge railroad tracks"
by G. E. Skorodumov, A. I. Smirnov, M. P. Smirnov. Reviewed by
D. Stepanov and others. Put' i put. khoz. 6 no. 8:45-46 '62.
(MIRA 15:10)

1. Glavnnyy inzh. Estonskoy dorogi, Tallin (for Stepanov).
2. Nachal'nik sluzhby puti Estonskoy dorogi, Tallin (for Rodinov).

(Railroads, Narrow-gauge---Track)
(Skorodumov, G. E.) (Smirnov, A. I.)
(Smirnov, M. P.)

FEDOROV, Nikolay Fedorovich, prof., doktor tekhn. nauk; GUSEV, Valerian Mikhaylovich, dotsent, kand. tekhn. nauk; POPRUGIN, I.V., inzh., retsenzent; MOROZOV, N.I., inzh., ratsenzent; GEFDING, A.K., kand. tekhn. nauk, nauchnyy red.; STEPANOV, D.A., inzh., nauchnyy red.; ZHURAVSKIY, N.A., red.; VOLCHOK, K.M., tekhn. red.; PUL'KINA, Ye.A., tekhn. red.

[Sanitary engineering] Sanitarnaia tekhnika. Leningrad, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 371 p.
(MIRA 14:6)

(Sanitary engineering)

VOROPAY, A.P.; VYZHEKHOVSKAYA, M.F.; DRUGOV, I.P.; KOMARNITSKIY, Yu.A.;
MAKSIMENKO, I.I.; PAVLOVSKIY, V.V.; STEPANOV, D.A.;
CHEREDNICHENKO, Ye.T.; GANKIN, M.B., retsenzent; FATEYEV,
P.Ya., retsenzent; PESKOV, L.N., red.; DROZDOVA, N.D., tekhn.red.

[Competition for communist labor in railroad transportation]
Sorevnovanie za kommunisticheskii trud na zheleznodorozhnom
transporte. Moskva, Transzheldorizdat, 1963. 158 p.
(MIRA 16:9)

(Socialist competition) (Railroads--Employees)

41299

S/035/62/000/010/072/128
A001/A101

AUTHOR: Stepanov, D. I.

TITLE: Experience of satellite luminosity determination by the photoelectric method

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 74,
abstract 10A551 ("Byul. st. optich. nablyudeniya iskusstv. sput-
nikov Zemli", 1961, no. 23, 15 - 17)

TEXT: The photoelectric measurements of the luminosity of satellite Echo
I, carried out at Kazan' on May 6, 1961, yielded the following values of its
stellar magnitude: ~ 1^m.22; - 1^m.20 and - 1.20. No marked variations of satellite
luminosity were detected as a result of these measurements.

V. G.

[Abstracter's note: Complete translation]

Card 1/1

L 46915-66 EWT(1)/EWT(m)/FCC GW

ACC NR: AR6015228 SOURCE CODE: UR/0269/65/000/012/0059/0059

AUTHOR: Gusakovskaya, L. B.; Stepanov, D. I.13
16B

TITLE: Twilight method of atmospheric investigation

SOURCE: Ref. zh Astronomiya, Abs. 12. 51. 455

REF SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1963 g. Sekts.: Paramagnitn. rezonansa, spektroskopii i fiz. polimerov, radiofiz., astron., bion. Kazan', 1964, 93-95

TOPIC TAGS: twilight atmosphere, atmospheric dust content, C layer, ionospheric C layer, atmospheric dust content

ABSTRACT: The Astronomical Observatory im. V. P. Engel'gardt of the Kazan' State University conducted photoelectric and chromatic measurements of the polarization of the twilight sky to determine the Earth's atmospheric dust content. A decrease in polarization was noted at an altitude of 50—70 km,

Card 1/2

UDC: 551.593.5

L 46915-66

ACC NR: AR6015228

3

indicating the probable presence of the new ionospheric layer C,¹⁷ described earlier by P. Ye. Krasnushkin and N. P. Kolesnikov. During the passage of large meteor streams, in particular the Perseids, a decrease in polarization was noted at an altitude of 70—120 km; this was accompanied by a reddening of the twilight sky, which indicates an increase in the concentration of dust in the upper layers of the Earth's atmosphere during the passage of meteor streams. (A. Demidov)
[Translation of abstract]

[SP]

SUB CODE: 03, 04/

Card 2/2 fv

L 150/140/65 EWT(1)/FOR OF

ACC NR: AR6015231 SOURCE CODE: UR/0269/65/000/012/0068/0068

AUTHOR: Stepanov, D. I.; Gusakovskaya, L. B.

42
5

TITLE: Possibility of detecting dust components at high altitudes during observations twilight

SOURCE: Ref. zh. Astronomiya, Abs. 12. 51. 531

REF SOURCE: Sb. Meteorn. rasprostr. radiovoln. No. 2. Kazan', Kazansk. un-t, 1964, 156-164

TOPIC TAGS: meteor observation, astronomic observatory, aerosol, light reflection

ABSTRACT: In April 1963, a number of polarization observations of the twilight sky were made at the Astronomical Observatory im. V. P. Engel'gard (AOE) during Lyrid showers. Although the number of observations was insufficient, the changes in lapse rate of the optical density obtained and the changes in the derivation reflecting power by altitudes do indicate the possibility of

Card 1/2

UDC: 523. 58

2-4691-1-26

ACC NR: AR6015231

detecting a layer of aerosols. It is concluded that by systematic observations with light filters during meteor showers it is possible to detect the layer of aerosols and to track its descent. S. Mayeva. Bibliography of 11 titles. [Translation of abstract] [NT]

SUB CODE: 03/

Card 2/2 fv

L 12994-66 EWT(1)/FCC GW/WS-2
ACC NR: AR6000795

SOURCE CODE: UR/0169/65/000/009/A024/A024

18

B

SOURCE: Ref. zh. Geofizika, Abs. 9A149

AUTHOR: Stepanov, D. I.; Gusakovskaya, L. B.

TITLE: Photoelectric polarization observations of twilight phenomena

CITED SOURCE: Sb. Meteorn. rasprostr. radiovoln. No. 2. Kazan', Kazansk. un-t, 1964,
146-155

TOPIC TAGS: polarization, twilight

TRANSLATION: The author gives a brief description of the equipment used for polarization photoelectric observation of twilight phenomena! Graphs are given showing the results of changes in the degree and angle of polarization and brightness of polarized and non-polarized components of the twilight sky with respect to altitude.

SUB CODE: 08 /

Card 1/1

Hu)

UDC: 551.593.55

L 52753-65 EVT(1)/EWG(v)/FCC/EWA(d)/EEC-4/EEC(t)/EWA(b) Po-4/Pe-5/Pq-4/Pae-2/
Peb/Pi-4 GS/GH

ACCESSION NR: AT5011170

UR/0000/64/000/000/0164/0171

55

AUTHOR: Stepanov, D. I.; Gusakovskaya, L. B.

TITLE: Photoelectric polarization observations of twilight

SOURCE: Mezhdvedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th, Moscow, 1963. Aktinometriya i optika atmosfery (Actinometry and atmospheric optics); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 164-171

TOPIC TAGS: twilight, light polarization, atmospheric optics, meteor incidence, color index, atmospheric dust, ionosphere

ABSTRACT: Specialists at the Astronomicheskaya observatoriya imeni Engel'gardta (Astronomical Observatory) have made polarization measurements of twilight since the autumn of 1961. Changes in the degree of polarization with height are shown in Figures 1 and 2 of the Enclosure. Analysis of the curves shows that the degree of polarization changes considerably not only from day to day but also in the brief interval between evening and

Cord 1/62

L 52753-65

ACCESSION NR: AT5011170

polarization at heights of 50-70 km. It can be postulated that the decreased polarization at these heights is a manifestation of a new ionospheric layer, the C layer, whose height varies in a range of several kilometers for the various days of observation. A stellar electrophotometer was used for twilight observations with Schott filters. The seasonal change in the color index at various heights is shown in Fig. 3 of the Enclosure. At a height of 70-80 km the color index changes opposite to the hourly number of meteors. The seasonal distribution of the degree of polarization for 1962 was also determined; this was compared

ASSOCIATION: Astronomicheskaya observatoriya im. Engel'gardta pri Kazanskom gosudar-stvennom universitete (Astronomical Observatory, Kazan State University)

SUBMITTED: 25Nov64

ENCL: 04

SUB CODE: ES

NO REF SOV: 005

OTHER: 000

Card

2/6

STEPANOV, D. L.

Ch. Geol; All-Union Geological Survey & Oil Prospecting Inst., -1947-. Mbr., All-Union Research Petroleum Inst., -1944-. "On the Stratigraphic Value of the Upper Carboniferous and Lower Permian Brachiopods," Dok. AN, 25, No. 9, 1939; "Do Permian Deposits Exist On the Eastern Slope Of the Urals?" ibid., 45, No. 7, 1944; "New Data on the Stratigraphy of the Upper Paleozoic Layers of the Volga-Ural Oil Bearing Regions," Vest. Leningrad. Univ., No. 8, 1947

STEPANOV, D.L., dots.

New data on the stratigraphy of the upper Paleozoic of the
Volga-Ural petroleum province. Vest. LGU 2 no.8:30-43 Ag
'47. (MIRA 12:9)
(Second Baku--Geology, Stratigraphy)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, D. I.

"Upper Carboniferous Brachypoda from Bashkiriya," Gostoptekhizdat, Leningrad
Division, 64 p., 1948

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

STEPANOV, D.L.

Brachiopoda in upper Paleozoic deposits of the Aldan Valley.
Uch.zap. LGU no.93:196-222 '48. (MIRA 10:10)
(Aldan Valley--Brachiopoda, Fossil)

STEPANOV, D.L.

~~Some problems on the nomenclature of stratigraphic subdivisions in
the upper Paleozoic. Uch.zap.Len.un.no.102:71-77 '50.~~

(MLRA 10:1)

I. Kafedra paleontologii Leningridskogo Gosudarstvennogo ordena
Lenina universiteta imeni A.A. Zhdanova.
(Geology, Stratigraphic)

STEPANOV, D. L.
USSR/Geophysics - Paleontology Classification

Oct 52

"Some Problems of Paleontological Systematics," D. L. Stepanov

Vest Leningrad U, Ser Biol, Geog, Geol, Vol 7, No 10, pp 121-132

This article, representing the text of a report made at a scientific session of Leningrad State Univ in Dec 1950 at the meeting of the section of geological sciences, is devoted to a discussion of some problems of paleontological systematics, mainly in application to the study of the upper paleozoic brachiopoda, and attempts to design means of solving these problems on the basis of the principles of Michurin's biology.

372-759

STEPANOV, D.L.

SARYCHEVA, T.G.; SOKOL'SKAYA, A.N. [authors]; STEPANOV, D.L. [reviewer].

New type of paleontological publication ("Guide to Paleozoic brachiopods of the Moscow Basin." T.G.Sarycheva, A.N.Sokol'skaia. Reviewed by D.L.Stepanov). Izv.AN SSSR. Ser.geol. no.4:136-138 Jl-Ag '53. (MLR 6:8) (Sarycheva, T.G.) (Sokol'skaia, A.N.) (Moscow Basin--Brachiopoda, Fossil) (Brachiopoda, Fossil--Moscow Basin)

STEPANOV, D.L.

LYUSHKEVICH, Ye.M.; STEPANOV, D.L.; TRIKHA, V.B.

Permian deposits of the Soviet Baltic region. Biul. MOIP. Otd. geol.
28 no.6:3-14 '53. (MLRA 6:12)
(Baltic region--Geology) (Geology--Baltic region)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, D.L.

In memory of M.B.IAnichevskii. Uch.zap.Len.un.no.159;3-11 '53.
(IAmichevskii, Mikhail Krastovich, 1871-1949) (MLRA 9:6)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

YANISHEVSKIY, M.E., professor; STEPANOV, D.L., professor, redaktor

[Brachiopoda of the Lower Carboniferous in Leningrad Province]
Fauna brachiopod nizhnego karbona Leningradskoi oblasti. S 49
tablitsami i 34 risunkami v tekste. Leningrad, Izd-vo Lenin-
gradskogo gos. ordena Lenina univ. im. A.A.Zhdanova, 1954. 278 p.
(MLRA 9:3)

(Leningrad Province-- Brachiopoda, Fossil)

D. L.

VASSOYEVICH, Nikolay Bronislavovich, professor, doktor geologo-mineralogicheskikh nauk, redaktor; YASHCHURZHINSKAYA, A.B., redaktor; STEPANOV, D.I., doktor geologo-mineralogicheskikh nauk, redaktor; ERELYAKOV, M.F., kandidat geologo-mineralogicheskikh nauk, redaktor; MURATOV, V.N., kandidat geologo-mineralogicheskikh nauk, redaktor; SOKOLOVA, Ye. V., tekhnicheskiy redaktor.

[Guide for petroleum geologists in the field] Sputnik polevogo geologa-neftianika. Izd.2-e, ispr. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gornoi-toplivnoi lit-ry. Vol. 1. 1954. 544 p.
(Petroleum geology) (MLRA 7:12)

STEPANOV, D.L.

Schwagerina beds, the Sakmara stage and the limits of the
Carboniferous and Permian. Izv.AN SSSR Ser.geol. no.1:107-117
Ja-F '54. (MLRA 7:3)
(Geology, Stratigraphic)

VASSOYEVICH, Nikolay Bronislavovich, doktor geologo-mineralogicheskikh nauk, obshchiy redaktor; STEPANOV, D.L., doktor geologo-mineralogicheskikh nauk, redaktor; BELYAKOV, M.F., kandidat geologo-mineralogicheskikh nauk, redaktor; MURATOV, V.N., kandidat geologo-mineralogicheskikh nauk, redaktor; YASHCHURZHINSKAYA, A.B., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor.

[Guidebook for the geologist and petroleum engineer in the field]
Sputnik polevogo geologa-neftianika. Izd. 2-e, ispr. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry. Vol. 2. 1954. 564 p.
(Petroleum geology)

STEPANOV, D.; RUKHINA, Ye.

Eleventh scientific meeting of the Leningrad University (Section of
Geological Sciences) Vest.Len.un. 10 no.10:128-129 0 '55. (MIRA 9:1)
(Geology)

15-57-8-10400

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8,
p 4 (USSR)

AUTHOR: Stepanov, D. L.

TITLE: Investigations Carried out by the Expeditions of the
Institute of Earth's Crust (Ekspeditsionnyye issledo-
vaniya Instituta zemnoy kory)

PERIODICAL: Vestn. Leningr. un-ta, 1956, Nr 24, pp 180-182.

ABSTRACT: Efforts of the geologists participating in the expe-
ditions of the Leningrad University during the summer
of 1956 were concentrated on Central Asia (Pamir, Tyan-
Shan, Turkmenskaya SSR). Investigations conducted in
these regions included the solutions of problems in
stratigraphy, lithology, tectonics and hydrogeology.

No name

Card 1/1

TorANOV, professor, redaktor; ZAHINA, I.Ye., redaktor; MODZALEVSKAYA, Ye.A., redaktor; OVECHKIN, N.K., redaktor; RENGARTEN, V.P., redaktor; SIBBOTINA, N.M., redaktor; GOROKHOVA, T.A., redaktor izdatel'stva; GURUVA, O.A., tekhnicheskiy redaktor

[Problems in paleobiogeography and biostratigraphy; proceedings of the 1st session of the All-Union Paleontological Society (January 24-28, 1955)] Voprosy paleobiogeografii i biostratigrafi; trudy I sessii Obshchestva (24-28 Ianvaria 1955 g.). Moscow, Gos. nauchno-tekhn. izd-vo lit-ry po zool. i okhrane nadr, 1957. 229 p. (MLRA 10:10)

1. Vsesoyuznye paleontologicheskoye obshchestvo
(Paleontology)

STEPANOV, D.L.

Neotenic phenomena and their importance in evolution. Vest. LGU
12 no.18:14-28 '57. (MIRA 11:3)
(Neoteny)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, D.L.

New Permian stage in the Arctic [with summary in English]. Vest.
IGU 12 no.24:20-24 '57. (MIRA 11:5)
(Arctic regions--Geology, Stratigraphic)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9"

STEPANOV, D.L.

Dimorphism and neoteny in Paleozoic brachiopods. Ezhegod. Vses.
paleont. ob-na 16:3-10 '57. (MIRA 11:4)
(Mimorphism (Animals))
(Neoteny)
(Brachiopoda, Fossil)

COUNTRY : USSR
CATEGORY :

ABS. JOUR. : RZBiol., No. 1, 1959, No. 381

AUTHOR : Stepanov, D. L.
AFFILIATION : Institute of University and their
EVALUATION : Evolutionary significance

ORIG. PUB. : Vestn. Leningr. un-ta, 1957, No 18, 14-28

ABSTRACT : Recently the important role of phenomena of neoteny in the evolution of animal and vegetable kingdom has become clearly apparent. It is pointed out that the relationship between phenomena of complete and partial neoteny is only of quantitative nature, since the gist of the phenomenon is a premature completion of ontogenesis and an omission of its terminal stages. As a result there may arise more or less considerable, and sometimes even large, evolutionary neo-formations, which are comprised within the term of pedomorphism. An analysis is made of the importance of neoteny and pedomorphism in development of various systematic groups of animals and plants (of certain sponges, oligomeric Annelida, Appendicularia,

CARD: 1/4

COUNTRY : USSR
CITY, STATE :
B-7

ASST. JOUR. : RZBiol., No. 1, 1959, No. 381

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : and among plants -- of the group of ferns, herbaceous forms of angiosperms, etc.). Neoteny is considered as a reaction of the organisms to changed conditions. Adherence is given to the idea of Hardy and Takhtajanyan concerning pedomorphism, or evolution by way of neoteny, as a means of overcoming the "dead-end of specialization". By means of neoteny a specialized group can increase anew its evolutionary plasticity and originate a new line of development. Therein resides the biological significance of pedomorphism as one of the modes of the process of evolution. An analysis of phenomena of neoteny is presented, based upon concrete material pertaining to

CARD: 2/4

47

CITATION :

ABD. JOUR. : RZBiol., No. 1, 1959, No. 381

AUTHOR :

JUST, :

TITLE :

ORIG. PUB. :

ABSTRACT : different groups of fossils: Foraminifera, Corals, Paleozoic and Mesozoic Brachiopoda, Ammonoidea, Mollusca, Crustacea, Crustaceans; Vertebrates. Apparently, Secrecy also plays an important part in antropogenesis. The necessity is noted of more extensive investigations of the role of secrecy, particularly in view of the fact that in redomorphism there is possible a development of forms without gradual transitions or of intermediate forms between ancestor and offspring. Thus, it becomes necessary to give consideration to the existence of intermittence in phyletic series, an intermittence which is due not to lacunas in geological records, but is of a primary nature, and reflects intermittent nature of

CARD: 3/4

MANUFY : Beck
CATEGORY :

B-1

ABS. JOUR. : RZBiol., No. / 1950, No. 381

AUTHOR :
INST. :
PEPLA :

ORIG. PUB. :

ABSTRACT : evolution due to pedomorphism. Bibliography
50 references. -- P. F. Rokitskiy.

CARD: 4/A

44

STEPANOV, D.L.

Border between the Carboniferous and Permian in the light of new data,
Trudy Len. ob-va est. 69 no. 2:25-46 '57. (MIRA 11:2)
(Geology, Stratigraphic)

MIRONOVA, M.G.; STEPANOV, D.L.

On the age of the marlaceous level of the lower Permian stratum
in the Pechora Basin. Dokl. AN SSSR 114 no.3:623-626 My '57.
(MLRA 10:8)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
Predstavлено akademikom D.V. Malivkinym.
(Pechora Basin--Geology, Stratigraphic)

STEPANOV, Dmitriy Leonidovich; KULIKOV, M.V., red.; DAYEV, G.A., vedushchiy red.; CANNAD'YEVA, I.M., tekhn.red.

[Principles and methods of biostratigraphic studies] Printsipy i metody biostratigraficheskikh issledovanii. Leningrad. Gos. nauch.-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, Leningradskoe otd-nie. 1958. 180 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no. 113) (MIRA 11:9)
(Geology, Stratigraphic) (Paleontology)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001653130012-9

STEPANOV, D.L.

Brachiopods in the Lithuanian zechstein. Uch.zap.LGU no.268:
190-207 '58. (MIRA 12:6)
(Lithuania--Brachipoda, Fossil)

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DAVITASHVILI, Leo Shivovich; STEPANOV, D.L., red.; ABKEVICH, P.L., red.
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red.

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red.; YEVANGULOV, B.B., red.; LEFIMOVA, A.F., red.; ZIMKIN, A.V.,
red.; LARIN, N.I., red.; LIKHAREV, B.K., red.; MENNER, V.V., red.;
MIKHAYLOV, A.F., red.; NIKOLAYEV, A.A., red.; POPOV, G.G., red.;
POPOV, Yu.N., red.; SAKS, V.N., red.; SEMEYKIN, A.I., red.;
SIMAKOV, A.S., red.; TITOV, V.A., red.; SHILO, N.A., red.; EL'YANOV,
M.D., red.; LAKUSHEV, I.R., red.: V redaktyrovani prinali uchast-
tiye: ANDREYEVA, O.N., red.; BAYKOVSKAYA, T.N., red.; BOLKHOVITINA,
N.A., red.; BORSUK, M.O., red.; VASIL'YEV, I.V., red.; VASILEVSKAYA,
KIPARI-N.D., red.; VOLEVODOVA, Ye.M., red.; YEVSEYEV, K.P., red.;
SOVA, L.D., red.; KRASNYY, L.I., red.; KRISHTOFOVICH, L.V., red.;
KULIKOV, M.V., red.; LIBROVICH, L.S., red.; MARKOV, F.G., red.;
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red.; PCHELINTSEVA, G.T., red.; RZHONSNITSKAYA, M.A., red.; SEDOVA,
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K.M., red.; CHEMEKOV, Yu.F., red.; CHERNYSHEVA, N.Ye., red..
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(Continued on next card)

ANIKEYEV, N.P.---(continued) Card 2.

[Decisions of the Interdepartmental Conference on the Unified Stratigraphic Columns of the Northeastern Part of the U.S.S.R.]
Resheniya Mezhdromstvennogo soveshchaniia po razrabotke unifitsirovannykh stratigraficheskikh skhem dlia Severo-Vostoka SSSR,
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gical Society, Jan. 24-29, 1957] Voprosy biostratigrafiii kon-
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IVANOV, Andrey Alekseyevich; LEVITSKIY, Yuriy Frolovich; SPIZHARSKIY, T.N.,
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S.M., retsenzent; TATARINOV, P.M., red.; GOL'DBERG, R.Ya., red.
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T.B.; GORSKIY, I.I., otv. red.; YEVSEYEV, K.P., otv. red.;
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